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S Guessasma, G Montavon... - Computational materials science, 2004 - Elsevier

... are kinematic parameters influencing particularly the deposit microstructure characteristics and the thermal exchanges since they **control**, for a ... porosity level increases with the decrease of the current intensity, the increase of total **plasma** gas flow rate, **spray** distance, etc. ...

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... The coating quality **control** of such technique generally considers the monitoring of the molten feedstock particle characteristics (ie ... 1): arc current (I), argon primary **plasma** gas flow rate (A) and hydrogen secondary **plasma** gas flow ... **Spray** configuration, **Spray** distance, mm, 125. ...

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... properties of **plasma** sprayed alumina-titania coatings: role and **control** of the ... AK Sharma, K. Vijayakumar and R. Rishnamurthy, Evaluation of **plasma** deposited alumina-titania. In: EF Lugscheider, Editor, International Thermal **Spray** Conference 2002, DVS-Verlag, Düsseldorf ...

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... Kanta et al./**Plasma Spray** Process On-Line **Control** by Artificial Intelligence Methodology COMMUNICATIONS 108 http://www.aem-journal.com © 2007 WILEY-VCH Verlag GmbH & Co. ... 1-2 power process parameters artificial **neural network** MAPE RSME fuzzy **control** ...

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AF Kanta, G Montavon, M Vardelle... - ... of Thermal Spray ..., 2008 - Springer

... a real value from the result of the inference is produced and can be used as a fuzzy **control** input FL ... tool (CCD camera equipped with filters and a short, ie, a few ms, aperture duration) for each **spray** parameter set to obtain an optimal particle trajectory within the **plasma** flow. ...

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S Guessasma, Z Salihi, G Montavon... - Materials Science and ..., 2004 - Elsevier

... experimental ones allowing the identification of the **control** factors. Author Keywords: Artificial **neural network**; Atmospheric **plasma spray** process; Process **control**; Diagnostic tool; In-flight particle characteristics; Processing parameters. ...

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S Guessasma, FI Trifa, G Montavon... - Materials & design, 2004 - Elsevier

... This **control** is conditioned essentially by the following factors: • the complexity level of coated piece ... to form the coating; • the particle state modifications during the flight in the **plasma** jet. ... a heuristic model is implemented in order to study the effects of the **spray** parameters on ...

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